

~~said diaphragm having a plurality of conductors on its planar surface for inducing electromagnetic force acting on said conductors when current flows through said conductors,~~
wherein

- said magnets are in magnetic interaction with a magnetically conducting material to conduct magnetic field strength from said magnets to said diaphragm,

- said magnetically conducting material is not a permanent magnet, and

- said magnetically conducting material is configured as plates on said one side of the diaphragm, between which permanent magnets are located, where one edge of each of said plates constitutes a magnetic pole,

- said edges of said plates are arranged only on one side of said region for providing field strength through said diaphragm with magnetic field lines substantially parallel with said region, and

- said conductors on said diaphragm are arranged in a pattern in relation to said magnetic field strength through said diaphragm, said relation being such that said electromagnetic force acting on said conductors is directed substantially normal to said surface of said planar diaphragm.

12. (Previously Presented) Diaphragm transducer according to claim 11, wherein said conductors are arranged in a pattern with varying mutual distances and directions.

13. (Previously Presented) Diaphragm transducer according to claim 11, wherein that said magnetic field through said diaphragm is approximately constant.

14. (Cancelled).

15. (Currently Amended) Diaphragm transducer according to claim 11, [14,] wherein the number of poles are at least three with two outer poles and at least one inner pole.

16. (Previously Presented) Diaphragm transducer according to claim 15, wherein said number of inner poles located between the outer poles is at least two, where said inner poles are arranged in pairs of poles with a distance between the two plates constituting said pair.

17. (Previously Presented) Diaphragm transducer according to claim 16, wherein said distance between said two plates constituting a pair of poles, is between 0.1 and 3 mm, preferably between 0.3 and 1.5 mm and preferably between 0.4 and 0.6 mm.

18. (Previously Presented) Diaphragm transducer according to claim 11, wherein said magnetically conducting material is soft iron

19. (Previously Presented) Diaphragm transducer according to claim 11, wherein said diaphragm comprises a magnetically conducting layer.

20. (Previously Presented) Diaphragm transducer according to claim 19, wherein said magnetically conducting layer comprises at least one from the group consisting of a coating with soft iron and a coating with Permalloy.